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Competitive Position of

THE YUGOSLAV DRIED-PRUNE INDUSTRY

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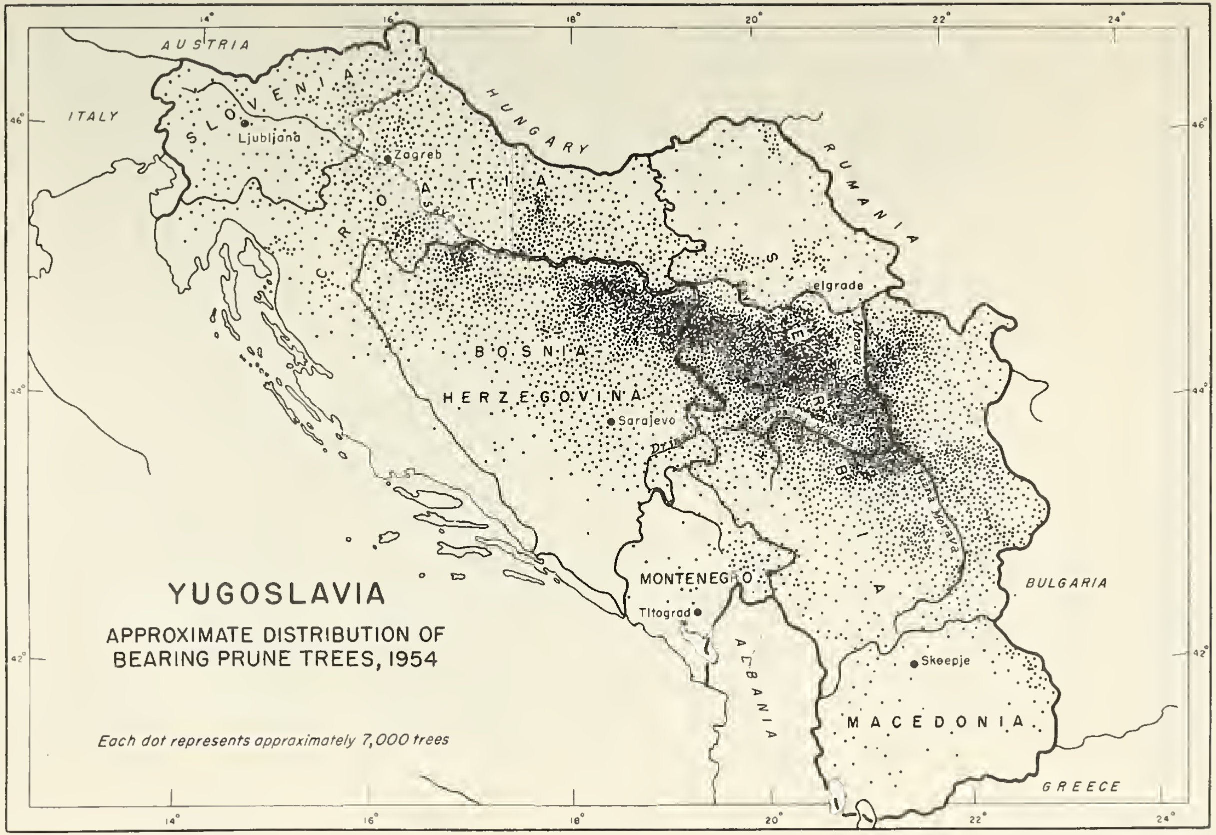

YUGOSLAVIA

APPROXIMATE DISTRIBUTION OF
BEARING PRUNE TREES, 1954

Each dot represents approximately 7,000 trees

U. S. DEPARTMENT OF AGRICULTURE

NEG. 600 FOREIGN AGRICULTURAL SERVICE

Moreover, in Yugoslavia only a small proportion of each crop of fresh prunes is dried. The biggest share of it goes into brandy, a use that is now steadily increasing. In a year of a small crop, therefore, after the prunes for brandy have been set aside there may be very little remaining for other uses.

One of the factors in this increasing preference for brandy as an outlet for fresh prunes is the disappearance of forests and the increasing price of firewood--a circumstance that has grave implications for the Yugoslav dried-prune industry. Many prune growers, it has been reported, now that they find fuel an important cash cost, have calculated that distillation represents a more profitable--and incidentally, an easier--disposition of their fruit than drying. As firewood becomes scarcer and more expensive, the profitability of even brandy making may be threatened, unless brandy prices keep pace. The obvious solution, of substituting another fuel for wood, will be difficult to achieve.

THE FRESH FRUIT

Yugoslavia probably has more prune trees than any other country in the world. In 1954 it had over 57 million prune and plum trees of bearing age. (Yugoslav statistics do not distinguish between prune and plum trees.) In contrast, California, which produces most United States prunes, had, according to the 1950 census, only 10 million prune and plum trees of bearing age; and Washington and Oregon, next largest producers, together had only 2.6 million.

If one is to judge by official statistics, the number of bearing prune and plum trees in Yugoslavia is much greater now--40 percent greater--than it was before the war:

Year	Bearing trees (1,000)	Nonbearing trees (1,000)	Total trees (1,000)
1930-39 ave.	40,919	(1)	(1)
1948	56,039	27,568	83.607
1949	54,749	28,711	83,460
1950	55,843	26,446	82,289
1951	56,903	22,511	79,414
1952	55,421	20,406	75,827
1953	57,043	18,428	75,471
1954	57,370	(1)	(1)

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[1] Not available.

But there is some reason to believe that fruit trees are now more fully enumerated than they were in prewar censuses; and a considerable part of the increase in bearing trees may be due to that fact alone. Besides it is significant that, at the same time that the number of bearing trees has been increasing, the number of nonbearing trees has been declining steadily: in 1953, the latest year for which data on nonbearing trees are available, their number was the lowest in 6 years and fully 10 million less than in 1949. This decline indicates the peasant's discouragement with the growing of prunes.

The bearing prune and plum trees of Yugoslavia are distributed among the country's Provinces as follows:

	Million trees
Serbia	38.8
Bosnia-Herzegovina	11.6
Croatia	5.0
Slovenia	.8
Macedonia	.7
Montenegro	.5
	57.4

In Serbia, which has about two-thirds of the bearing trees, the major prune area is south of the Sava River and west of the Morava, where the terrain is hilly to mountainous; a specially heavy concentration of trees is found in the northern part of the Drina Basin. The trees are planted on the sloping valley walls, low plateaus, and hillsides. Serbia, together with adjoining Bosnia-Herzegovina, the second most important region, accounts for 88 percent of the country's bearing trees.

The climate of the main prune-growing sections of Yugoslavia is quite similar to that of eastern Wisconsin, Illinois, and Ohio, though of course the hilly and mountainous terrain causes considerable local variation. The last killing frost in the spring usually occurs in April; the earliest fall frost, in September or October. The average maximum temperature is about 95°F.; the average minimun, about zero. Rainfall in the leading prune localities is about 35 inches annually; June, with 4 to 5 inches, is the wettest month; August and September, with 2 to 3 inches each, are the driest. Many places in Serbia have less rain, averaging less than 30 inches and even less than 25 inches a year, but irrigation is rarely practiced in such localities.

About 55 percent of the prune and plum trees are of the Pozega type, clearly a prune variety. It has the same origin and is similar to but not identical with the French prune, d'Agen, the predominant California variety, which is sweeter than the Pozega and has a larger percentage of flesh. The Pozega is medium-sized and has a small stone, which separates easily from the flesh. The skin is violet blue; the flesh is golden yellow and reputedly possesses a higher acid content than the California prune. The Pozega dries well, but the dried prunes are small, mostly 70-80 per pound. It is also used in making jam and brandy.

The remaining types are somewhere halfway between prunes and plums in their characteristics, but they are not used for drying.

The overwhelming proportion of prune trees are grown in small plots by small producers. Groves of about one-half acre with possibly 50 trees are common in the main producing regions. Although somewhat larger groves also are found, orchards of several acres are relatively rare. Thus prunes are produced by literally hundreds of thousands of growers. In contrast, California reports, in the 1950 census, only 27,000 farms with prune or plum trees; and Washington and Oregon, only 45,000.

Unlike the other tree fruits in Yugoslavia, prune trees are not scattered about as borders along fields or as isolated trees in farmyards or vineyards. They are characteristically grown in compact plots as separate orchards, even if on a small scale. The orchards are cropped while the trees are young; later, they are grazed.

By American standards Yugoslav prune yields are low. The average in 1948-52, for example--20.5 pounds per tree--is about one-fourth of California yields. Even in Washington and Oregon, where a considerable number of the prune and plum trees are not irrigated, the yields are about $2\frac{1}{2}$ times those of Yugoslavia. The tabulation below shows yields, fresh basis, over a period of years:

Year	Pounds per tree	Year	Pounds per tree
Average:		Annual:	
1930-39	27.2	1930	22.7
1948-52	20.5	1934	24.7
1950-54	23.7	1936	33.7

Annual--Continued

1938	15.7	1950	8.8
1939	61.5	1951	45.0
1948	24.0	1952	9.5
1949	15.4	1953	39.5
		1954	15.7

On the average, yield per tree seems to have declined sharply from the prewar level. The actual decline, however, may not be as great as the 25 percent that statistics show between 1930-39 and 1948-52. If tree numbers are being more fully enumerated now than before the war, as they do appear to be, that fact of itself would cut down the estimated yield per tree. Nevertheless, it is likely that there has been some actual decline in productivity.

It is noteworthy that the yields in the off-years 1950 and 1952 are much below any of the yields shown for the prewar period. The reasons for the low yields and extreme year-to-year fluctuations are not difficult to find.

In Yugoslavia the peasants give primary attention to their field crops and consider fruits as only a secondary enterprise, devoting only a minor portion of their small holdings to fruit-growing. And though peasants will cultivate their field crops intensively, they are inclined to leave the fruit trees to nature's providence and consider that whatever a fruit tree yields is a net profit. Prune trees are therefore very rarely sprayed, pruned, fertilized, or fruit-thinned, and hardly ever irrigated even where necessary.

Also contributing to the low yields are soil erosion, depletion of soil nutrients, and the widespread occurrence since the war of an affliction known as Sarka, which is generally believed to be a virus disease. It has reportedly affected about 15 million prune and plum trees and is still spreading. The symptoms manifest themselves mainly in the fruit,which takes on a shriveled pocked appearance and irregular coloring with blotches of green on the surface. The fruit shows these signs of Sarka about 14 days before ripening and about 6 days later falls from the tree. Such fruits have no commercial value and are not even suitable for the home manufacture of the popular plum brandy. No remedy is known for the disease nor has any preventive agent been discovered. It has been recommended by Yugoslav agriculturists that affected trees be pulled out and burned, but peasants are not inclined to adopt such a drastic measure, especially since the trees themselves seem fairly normal while the fruit is being attacked. Nor has it been conclusively shown that a virus is responsible for Sarka. Some fruit specialists in Yugoslavia believe that there is some possibility of these symptoms' being due to a trace-element deficiency, soil exhaustion, or, conceivably, degeneration of the long-used Pozega stock.

Despite the decline in yields, however, the crops of fresh prunes and plums in Yugoslavia in recent years have not been radically different from those before the war: from 1948 through 1952 they averaged about 4 percent less than those during 1935-39; from 1950 through 1954, about 12 percent more (table 1). The recent increase over prewar production is of course attributable to the increased number of bearing trees, which has more than offset the sharp decline in yields.

Table 1.--Production of fresh and dried prunes and other plums in Yugoslavia, average 1935-39, 1948-52, and 1950-54, and annual 1948-54

Year	Total, in terms of fresh fruit	Dried		
		In terms of fresh fruit		In terms of dried fruit [1]
		Quantity	Percent of total	
	Short tons	Short tons		Short tons
Average:				
1935-39.....	598,600	91,500	15.3	30,500
1948-52.....	577,200	25,800	4.5	8,600
1950-54.....	672,930	52,800	7.8	17,600
Annual:				
1948........	672,700	36,000	5.4	12,000
1949........	425,300	5,400	1.3	1,800
1950........	244,800	7,500	3.1	2,500
1951........	1,281,800	76,800	6.0	25,600
1952........	261,600	2,700	1.0	900
1953........	1,126,800	150,000	13.3	50,000
1954........	449,700	27,600	6.1	9,200

[1] A conversion factor of 3 pounds of fresh fruit for 1 pound of dried was used. In practice in Yugoslavia it varies from 3.0 to 3.5 pounds of fresh fruit to 1 pound of dried.

Only a small proportion of the fresh harvest is used for drying. Generally speaking, the crop is distributed among various uses, as shown in the tabulation on page 7.

Consumed fresh or wasted	20 to 30 percent
Processed:	
Made into brandy	50 to 60 percent
Made into jam	10 percent
Dried	8 percent
Otherwise used	2 percent

Of the fruit consumed fresh, nearly all is used within the country. Once exports of fresh prunes and plums amounted to 20,000-50,000 tons a year; now (1950-54) they average about 6,500 tons. Shortcomings in the quality of Yugoslav fresh fruit due to inadequacies in grading, packing, transportation, and warehousing have reduced sales possibilities in the increasingly competitive European markets.

Distilling is the favorite form of processing; it is a means of utilizing overripe fruit, and the growers resort to it particularly when they have a large crop for which there is no outlet. Consumption of brandy, or slivovitz, is high not only in rural communities but by the general public as well; there are sections of the country where it is the only alcoholic drink served. Complete and reliable statistics are not available on the distillation of brandy, but there is little doubt that it represents by far the major use of prunes and plums in Yugoslavia. It has been roughly estimated that in 1951, for example, when the crop was large, over 150 million liters of brandy were produced from prunes and plums. There are no restrictions on the distillation of brandy, and any grower is free to make some. Relatively small quantities of the brandy find an outlet in export markets.

Jam is another use for overripe fruit. It is made right out in the fields without the addition of sugar; some of better quality is made in the homes. Export possibilities have decreased, but jam continues as an important product for consumption within the country, particularly in rural areas where no other fruit products are available.

THE DRIED PRODUCT

Yugoslav production of dried prunes has recovered somewhat from the decline it suffered during and shortly after World War II. Before the war, Yugoslavia was producing

Table 2.--Estimated production of dried prunes in the chief producing countries,[1] average 1935-39 and 1948-52, annual 1950-54

[In short tons]

Country	Average 1935-39	Average 1948-52	1950	1951	1952	1953	1954
Argentina....	1,500	[2] 5,700	6,000	5,000	(3)	(3)	(3)
Australia....	2,900	2,800	2,500	3,100	2,700	3,800	4,000
Chile	1,100	3,600	3,100	3,300	5,500	3,600	(3)
France.......	4,700	8,400	6,800	9,300	4,400	9,700	7,300
Union of South Africa	1,100	1,800	500	1,700	3,000	1,600	2,400
Yugoslavia...	30,500	8,600	2,500	25,600	900	50,000	9,200
United States	237,560	160,900	149,600	180,200	137,200	148,400	183,000
Total	[4] 279,360	191,800	171,000	228,200	[5] 159,400	[5] 222,800	[6] 215,200

[1] Bulgaria and Rumania, once important producing countries, have been omitted for lack of data in the postwar years. According to trade statistics of countries that formerly imported dried prunes from Bulgaria and Rumania, these 2 countries are no longer significant exporters.

[2] 1945-51 average.

[3] Not available.

[4] Exclusive of 9,400 tons in Bulgaria and 12,000 tons in Rumania.

[5] Includes, for Argentina, an assumed production of 5,700 short tons--the average for 1947-51.

[6] Includes, assumed productions as follows: for Argentina, 5,700 short tons; for Chile 3,600.

an average of 30,500 short tons a year--11 percent of the output of the world's chief producing countries (table 2). In 1948-52 it produced only 4.5 percent; and in the last 5 years, when it has averaged 17,600 tons a year, 9 percent.

Processing.--Harvesting of the prunes, which begin to ripen about the first of August, usually starts in mid-August and continues till the end of September; in the lowlands, of course the season is earlier than at higher elevations. The prunes are shaken off the branches and, without being washed or dipped, are spread out in shallow wooden trays, 6 feet by 3 feet, with slatted bottoms made of interwoven twigs.

These trays of prunes are put directly into farm driers, which are the main means of effecting the first dehydration of prunes. The farm drier is a homemade affair, about 7 feet high, built of clay walls. It stands out in the open and, with its overhanging roof, looks like a shed. A clay stove is built into the lower part, making the shed in effect a tall oven. A common type holds 12 trays in 2 tiers. A batch of prunes is heated for approximately 24 hours. The proper temperature and moisture content of the air are judged by the "feel," without benefit of thermometer and hygrometer; as a result the product is uneven. Moisture content, for example, ranges from 20 to 36 percent.

A larger, more efficient type of drier, known as a Stojkovitch, is used by some farmers; but it is relatively expensive to construct, and only a few hundred are found in Yugoslavia. Both the Stojkovitch and the usual farm drier burn only wood; but the Stojkovitch burns it less wastefully.

A serious problem that has arisen in connection with the use of farm driers is the increasing difficulty of obtaining wood for fuel. Forests in Serbia and Bosnia, which once were widespread, have now largely disappeared. Whereas a peasant could once scrape together enough firewood without any outlay of cash, he is now confronted with the necessity of purchasing his fuel and finds that the price of wood is going up. The obvious solution, of substituting another fuel for wood, will be very difficult to achieve. The farm driers are not adaptable to use of coal or oil. The innumerable small producers do not have the capital or even the incentive to invest in a more elaborate type of home drier. The present wood-burning type can be built or repaired with labor and materials readily available in the countryside and requires no outlay of precious cash. Furthermore, transportation of lignite, the type of coal available in Yugoslavia, is not a simple matter for the peasant, who would have to haul it in by cartloads drawn by horse or oxen over poor roads. Besides, present lignite supplies are barely sufficient for nonfarm uses.

As for oil, Yugoslavia for at least several years will continue to be dependent upon imports, which, because of balance-of-payments difficulties, will be limited. And electricity is still in the realm of the future for much of rural Yugoslavia.

Perhaps the likeliest solution lies in the construction of a cooperative-type drying plant in each village, to which growers would bring their prunes for the first dehydration. Such plants could use either coal or oil. However, in view of the scattered location of prune growers and the lack of adequate communication and transport, especially in the mountainous sections, it would be difficult for all producers to have their prunes dried in cooperative plants.

Most home drying is done in September. The prunes are then sold to processing plants--since the war, reportedly through cooperatives. Information as to how these cooperatives function has not been complete; besides, they have recently undergone far-reaching changes instituted by the government. The processing plants, which were privately owned commercial enterprises before the war, are now run by the government. Their exact status also is not clear--whether they are now out-and-out state-owned or whether they function as some type of cooperative, as is sometimes claimed. These plants sterilize and pack the farm-dried prunes. Such a plant is known as an etuvage in Europe,after the French word etuve, which means a drying stove or disinfecting oven.

The prunes purchased by the processing plants are subject to very little inspection. Virtually all that they are checked for is size and surface defects. The price paid is based on size. In the prewar period, there were local''marke commissions'' in the prune-growing regions which fixed the earliest date at which producers could sell dried prunes (usually in mid-September) and then carried out compulsory inspection of the farm-dried prunes brought to market. The commissions would sample the prunes and either permit them to be sold or reject them as unsatisfactory. The prunes could be rejected for any of the following reasons:

1. That they were insufficiently dried, moldy, soft, rotten, or unsound.

2. That they were not uniformly dried.

3. That they were not of uniform size within a parcel.

4. That a parcel contained different varieties of prunes, or other kinds of dried fruit (as dried pears).

5. That the prunes had been overheated or scorched.

6. That they had a foreign or unnatural taste, as from kerosene or brandy.

7. That they had been unfit for drying in the first place, i.e., unripe, wormy, speckled, or disease-damaged.

The rejection of prunes of course resulted in financial loss to the producers, who were in this way induced to take precautions in their drying procedures and to bring only good prunes to market. But these inspection commissions no longer exist.

After having been bought by the processing plants, the prunes are delivered to the plants' warehouses in sacks, to await sterilization. Conditions in the warehouses vary greatly; in some, the prunes go bad very quickly if they have not been sufficiently dried.

The plants usually begin sterilizing in October. First, the prunes are sorted by size, in hand-operated machines with sieves of specified mesh. The Yugoslav size classification, as in France, is based upon number of fruits per half-kilogram (500 grams, or 1.1 pounds). Thus 70/75 per half kilogram, for example, is equivalent to 64/68 per pound, a classification which in the United States would fall into the 60/70 count. The usual Yugoslav size are 70/75, 80/85, 95/100, 110/120, and 120 plus the largest size is actually 60/65, but it is exceptional and does not appear in the regular trade.

After the prunes are sieved for size, they are culled by hand. They are then dumped into piles on the floor, by size categories, from which they are carried, in baskets or sacks, into a nearby room for boxing. Here they are again dumped into piles on the floor, and are then weighed, usually in 12½-kilogram lots (a kilogram equals 2.2046 pounds), in metal pails. This, too, is a hand operation.

The next step is the filling of the wooden packing boxes, most of which are built to contain 12½ kilograms. Boxes holding this weight are about 5 inches deep, 8 inches wide, and 20 inches long. They are made of fir and assembled within the prune-processing plant, entirely by hand.

Boxes holding 25, 33, and 50 kilograms also are used.

The boxes are lined with wax paper, and the bottom is often "faced" with a single tier of carefully placed prunes, which will become the top layer after the box is packed. A metal frame is placed around the box as prunes are heaped into it from the pail. This heap is then pressed down into the box, by a hand-turned machine which operates similarly to a jack. An extra 1 to 1.5 percent of weight of prunes is packed into each box to allow for the loss of weight resulting from the sterilization. The box lids are then nailed on and two metal hands fastened around each box.

The boxes of prunes are then ready for sterilization. They are loaded onto wheeled racks, and are rolled, usually on tracks, into the etuvage chambers, which have a capacity of 5 to 10 tons. The air in the chamber is heated up to 100°C. to 120°C. (212°F.-248°F.), and the boxed prunes are kept in it for 15 to 20 hours. In most of the plants, the ovens under the chambers are fired with wood. In one of the more modern plants, rebuilt since the war, coal is used. Here the chamber or tunnel is about 100 feet long and 15 feet wide. There are 4 metal flues the length of the tunnel along each of the sides. There are also 12 large fans installed along one of the sides.

Tests have shown that though the temperature in the sterilizing chamber may be as high as 248°F., the temperature in the middle of a box of prunes, especially if the box is large, does not exceed 140°F., which is insufficient for killing microorganisms. In order to attain a higher temperature in the middle of the box, the boxes would have to be held longer in the chamber or the temperature would have to be raised. Either of these procedures, however, would caramelize the outer layers of prunes; besides, it would raise still further the already high cost of heating. The present method results in the uneven drying of prunes, which have uneven percentages of moisture to begin with. The outcome is a product with a variable keeping quality.

The sterilization season usually lasts until Christmas. Information is not available as to the Yugoslav processing capacity. It is believed, however, that in the main processing season, October through December, something in the vicinity of 10,000 tons can be handled. Thus, when a big crop materializes, such as that in 1953, plants can handle the entire crop only by continuing processing into the spring and holding over some of the farm-dried prunes for processing the following fall and winter. There are reportedly 12 sterilizing plants in Yugoslavia with 4 additional ones under construction. The Yugoslavs make some use of refrigeration facilities for unsold prunes. There is capacity for several hundred tons of boxed prunes within Yugoslavia, and a few thousand tons were reported stored in Hamburg, Germany, in the winter of 1954-55.

Production Costs.--It is not possible, under Yugoslav conditions, to arrive at meaningful cost-of-production figures. The innumerable peasant farms on which dried prunes are produced incur virtually no cash expenditures in growing and drying the prunes. To attempt to allocate farm overhead costs and family labor input to the prune enterprise would be exceedingly difficult in the absence of farm accounts or surveys. As for costs incurred by the processing plants--sterilizing, grading, packing, storing, and shipping--information is not publicly available, especially since these plants are now state-owned, or "people's property."

Even if such data were available, however, it is doubtful that they would be significant to the United States reader, owing chiefly to the various artificial exchange rates that coexist in Yugoslavia.

Despite the lack of pertinent cost data there is good reason to believe that Yugoslav prunes cost less to produce than those of California. However, it is also believed that if Yugoslavia were to attempt to produce a higher quality product, one with greater uniformity of moisture content and grade, freer of defect, better packaged, and more hygienically handled, the cost of production would exceed that of California. That it would do so is attributable to the basic cost disadvantage of kiln drying in comparison with sun drying, especially in a country where fuel resources are scarce, where modern drying and processing procedures are difficult to install, where production is decentralized, and where transportation and storage facilities are inadequate.

Exports.--In the years immediately preceding World War II, Yugoslavia exported an average of nearly 21,000 tons of dried prunes annually; in the same period the United States exported about 95,000 tons per year (table 3). Both Yugoslav and United States prune exports have declined since then; the Yugoslav average exports in 1948-52 were 63 percent below prewar; United States exports, 23 percent below prewar. However, a more recent postwar average, for 1950-54, shows Yugoslav exports of approximately 10,000 tons and United States exports of about 45,000 tons, annually: for both countries shipments in this period were 52 percent below prewar. Yugoslavia in the last 5 years has accounted for approximately the same proportion of world exports of dried fruit as it did before the war, i.e., 16 percent now compared to 17 percent in the prewar years. This represents a considerable improvement over the earlier postwar years, 1948-52, when exports, amounting to 7,500 tons annually, accounted for only 9 percent of world trade in dried prunes. It may be of interest to note that in such early years as 1921-25 Yugoslav exports averaged over 44,000 tons annually, attaining well over 55,000 tons in certain years.

It may be significant that exports of dried prunes have fallen even more sharply than production, as the following tabulation shows:

Year	Production		Exports	
	Quantity (short tons)	Percent of prewar	Quantity (short tons)	Percent of prewar
Average:				
1935-39......	30,500	100	20,643	100
1948-52......	8,600	28	7,548	37
1950-54......	17,600	58	9,986	48
Annual:				
1950..........	2,500	8	501	2
1951..........	25,600	84	10,212	49
1952..........	900	3	9,768	47
1953..........	50,000	164	8,736	42
1954..........	9,200	30	20,721	100

Over two-thirds of the prewar production was exported, but less than three-fifths of the 1950-54 production. During 1948-52 when Yugoslav dried prune packs were exceptionally

Table 3.--Exports of dried prunes from principal producing countries, average 1935-39, 1948-52, and 1950-54, annual 1948-54

/In short tons/

Country	Average 1935-39	Average 1948-52	Average 1950-54	1948	1949	1950	1951	1952	1953	1954
Argentina...	4	1,120	1,717	112	672	2,464	784	1,568	3,628	[1]140
Australia [2].	632	650	[3]1,044	672	672	672	896	784	1,866	[4]849
Chile.......	699	2,957	[3]3,214	3,472	2,912	2,688	2,240	3,472	4,672	([5])
France......	[6]1,348	560	974	224	336	336	784	1,120	891	1,739
Union of South Africa	147	[7]728	[7]724	784	224	([5])	112	1,792	279	711
Yugoslavia..	20,643	7,548	9,986	13,939	3,322	501	10,212	9,768	8,736	20,721
United States	94,736	72,635	45,234	148,272	62,458	77,793	23,962	50,692	33,859	39,862
Total.....	118,209	86,198	62,893	167,475	70,596	84,454	38,990	69,196	53,931	[3]67,164
Yugoslavia, percent of total......	17	9	16	8	5	1	26	14	16	31

[1] First 10 months of year.

[2] Fiscal year.

[3] Partly estimated.

[4] First 5 months of year.

[5] Not available.

[6] 1934-38.

[7] Four-year average only: 1950 not available.

small, exports accounted for nearly 90 percent of the production. It may seem anomalous that Yugoslavia exported relatively large quantities in 1952 and in 1954, years of below-average production. This fact, however, was due to carryovers from the large 1951 and 1953 packs, which were exported in the year following the production.

Germany was Yugoslavia's largest buyer of prunes before the war, and the Federal Republic (West Germany) in the postwar years has generally ranked first or second (table 4). Though still much below the prewar level,Germany's takings in the more recent postwar years have been substantially higher than in the early postwar period.

The Iron Curtain countries, in aggregate, were Yugoslavia's second largest outlet before the war. Czechoslovakia and Poland were particularly important buyers.After the war both took much smaller but still significant quantities, and the Soviet Union also came in as a large customer. In 1948 all these countries together took nearly 9,000 tons, or nearly two-thirds of the Yugoslav exports. However, in consequence of the break in relations between Yugoslavia and the Cominform countries in 1949, no exports of prunes whatever to these countries took place from 1950 through the first half of 1954. It has been reported that the Iron Curtain countries reappeared as buyers in the latter half of 1954 although actual shipments were made only to Czechoslovakia and East Germany before the year's end. It is possible that the Iron Curtain countries may again develop into a major outlet for Yugoslav prunes in the wake of the apparent economic rapprochement of Yugoslavia and the Soviet Union. The reappearance of the Soviet Union and the satellite countries as buyers of Yugoslav prunes is a significant development. Should they resume buying substantial quantities, the glutting of Western European markets with Yugoslav prunes, especially after a big crop like that in 1953, would be less likely to occur.

A significant development has been the recent emergence of the United Kingdom as a major market for Yugoslav prunes. Prior to 1952, hardly any Yugoslav prunes were sold in the United Kingdom. France too has become an important outlet since the war. Denmark, Sweden, and Norway also are bigger markets than before, but takings by Sweden and Norway have

Table 4.--Exports of dried prunes from Yugoslavia to specified countries, average 1935-39 and 1948-52, annual 1948-54

[In short tons]

Country	Average 1935-39	Average 1948-52	1948	1949	1950	1951	1952	1953	1954[1]
Austria	656	648	565	261	136	2,103	176	394	1,895
Czechoslovakia.......	4,858	360	1,428	370	-	-	-	-	179
Denmark	163	477	-	-	-	1,069	1,315	1,731	808
Finland	-	18	-	-	-	-	88	338	601
France	50	681	1,321	530	-	1,133	420	575	930
Germany, West	[1]10,605	1,268	-	275	261	5,287	519	2,079	7,519
Hungary	404	15	75	-	-	-	-	-	-
Italy	343	80	-	94	17	235	55	56	666
Netherlands	37	223	441	675	-	-	-	-	656
Norway	16	66	-	-	-	331	-	-	2,495
Poland	2,825	130	597	51	-	-	-	-	-
Sweden	65	432	1,367	320	-	-	475	3	6
Switzerland	513	79	258	88	-	-	50	379	49
Trieste	-	251	1,015	88	58	54	40	137	1,285
United Kingdom	69	1,322	-	-	-	-	6,612	2,943	1,359
USSR	-	1,453	6,848	416	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	10	1,286
Other	39	45	24	154	29	-	18	91	[2]987
Total	20,643	7,548	13,939	3,322	501	10,212	9,768	8,736	20,721

[1] Prewar Germany.

[2] Includes 216 tons shipped to East Germany.

been very irregular. Dutch takings, too, in occasional years, have been much larger than before the war. Brazil suddenly appeared as an important buyer in 1954. On the other hand, exports to Switzerland and Italy have been well below the 1935-39 level.

All in all, the drop in sales to Germany, the Eastern European countries, Switzerland, and Italy has more than offset increases in movement to the United Kingdom, France, and the Scandinavian countries. Members of the prune trade in Europe feel that the greatest partiality for Yugoslav prunes, resulting from both flavor and price considerations, exists in central and eastern Europe.

As to export prices, it is reported that in December 1954 Yugoslav prunes from the 1953 crop were quoted to German importers as follows, f. o.b. Trieste or Fiume:

Size	Dollars per metric ton	Cents per pound
60/70	240	10.9
70/80	210	9.5
80/90	190	8.6
100/110....	180	8.2

There were rumors also that 1953 prunes sold at prices considerably less than those above.

Prices for 1954-crop prunes were quoted as follows by Yugoslav sources;

Size	Dollars per metric ton	Cents per pound
60/70.....	260	11.8
70/80.....	240	10.9
80/90.....	220	10.0
100/110 ...	200	9.1

The most common sizes were 70/80 and smaller.

In assessing the ability of Yugoslav prunes to continue to compete in foreign markets, it must be borne in mind that the prunes are government-owned--a fact which makes it possible for them to be sold at virtually any price, if the government is willing to absorb the loss. In order to fulfill a bilateral trade agreement or to acquire a certain foreign currency, the government may consider it worthwhile to sell the prunes for less than their cost. In this connection, it should be noted that Yugoslav prunes fit into the complementary type of trade existing between Yugoslavia and the industrialized Western European countries, whereby the latter ship industrial goods to Yugoslavia in return for raw materials. Yugoslav prunes, of course, have an advantage in transportation costs in the European market over prunes from overseas.

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